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Inaugural Dissertation

on

Cholera Morbus

by

George T. Yerby Papia March 24
1823
of Virginia.

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Chapman's Repository

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Whitman's Works

by

George W. Peck, Paper

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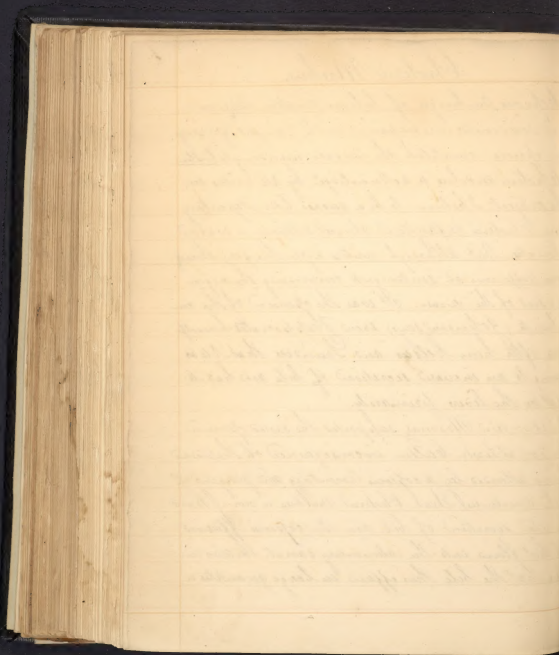
1821

Cholera Morbus.

1.

Copious discharges of bilious matter upwards and downwards accompanied with painful gripings and spasms constitute the disease. according to Cullen Cholera morbus is acknowledged by all writers on the subject I believe to be a disease like Dysentery and Cholera infantum almost endemic to warm climates. But although writers agree thus far; there is some difference of sentiment concerning the origin and seat of the disease. It was the opinion of the ancients (Johnson says) even Hippocrates himself and after him Celsus and Saunders that it is arising to an increased secretion of bile and had its seat in the liver primarily.

Cullen and Thomas supported the same opinion in part at least. Cullen in consequence of the disease being attended by a copious vomiting and purging of bile, concluded that Cholera morbus is owing to an increased secretion of bile and the copious effusion of that fluid into the alimentary canal. He also infers that the bile thus effused in large quantities is



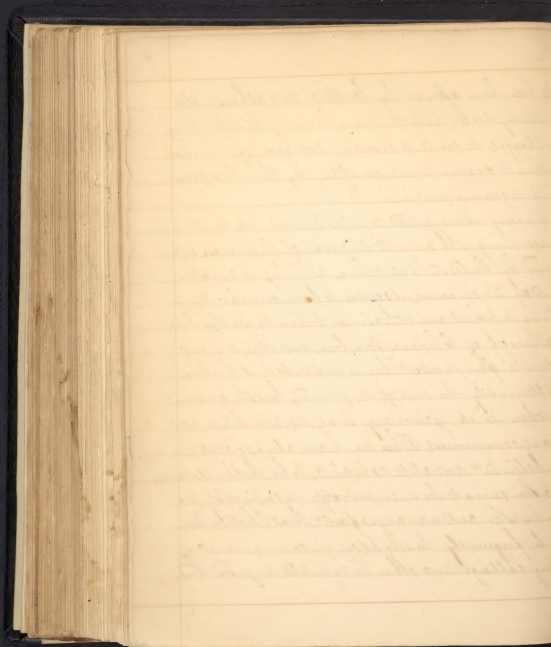
at the same time of a much more acid quality.
 But here I have to state that there writers of equal
 respectability and of more modern date who contend as
 we shall presently show (and we think correctly too)
 that this disease is not to be attributed to an increased
 secretion of bilious matter (although it is evacu-
 ated copiously) and also instead of the disease being
 primarily seated in the liver, the stomach is the part
 undoubtedly at which the diseased or morbid action
 first commences and consequently it is of gastric or-
 igin. In support of this I shall take the liberty
 of quoting the following passage from Johnsons
 tropical climates.

"Now it seems somewhat curious to me says that
 author that if an increased secretion of bile were
 the cause of the disease, we should see nothing of it till"
 a few days hours after the effects here some obtain!
 Where is the increased secretion all the time?
 Not in the stomach for it "discharges its contents
 and rejects what is undigested" long before. It is

not in the intestines for stools are at first "thin
and watery" At length however "greenish" mucus
is appearance, and lo! it is accused of being the cause
of all! The same under some other state in an other
passage in his treatise on this disease, that an increased
secretion of bile "so far from being the cause of Cholera
morbus, is upon the whole, a favourable symptom,
and that, in the very worst forms of the disease, it is
entirely absent. Ver. The bile, there is none secreted.
These sentiments are undoubtedly strongly con-
firmed by the fact that the first discharges from the
stomach and intestines are nothing more than
the ordinary contents of these organs and are not at all
bilious. But after a certain length of time in con-
sequence of the liver being stimulated to action
by sympathy or consent of parts, bile is secreted in
preternatural quantities and then the urines
become bilious and not until then. Now does that
fluid says professor Calverley appear to be cha-
racterized by any unusual acrimony in Cholera

(As has been asserted by Cullen and others) it is probably more blander than even in health, being discharged, as soon as secreted; And having, therefore, no time to acquire acrid qualities, by the absorption of its aqueous portion.

Having attempted to prove that the sentiments concerning the origin and seat of the disease supported by Cullen and others, both before and after his day are incorrect, it seems to be incumbent upon us to point out what we believe to be the true pathology of Cholera Morbus. And this we did so in a few words. There is no doubt but the liver is ultimately the seat of the disease, but the question is, where is its primary seat, and in what part does it commence? This we have already stated, "we believe" and still contend, to be in the stomach, and this seems to be ~~undoubtedly~~ indisputably proven by the circumstance of fact "that Cholera Morbus is frequently brought on in consequence of eating cabbage and other indigestible vegetables and



also from the symptoms of the disease in the
 stomach in every case is more or less affected and
 disturbed in the commencement of an attack. This is
 however owing to the close sympathy which exists
 between the stomach and liver. The latter organ
 becomes seriously involved and is excited into action
 and then bile is secreted in vast quantities. But
 occasionally it happens that the liver is torpid
 throughout the disease, and there is no bile, ^{secreted} and
 consequently none discharged. And here in these
 cases can only be brought away by administering
 calomel to the patient, which stimulates the liver
 and thus promoting its secretion. These cases
 Mr. Johnson tells us are the most severe forms of
 the disease.

Cholera Morbus is closely ally^d to bilious colic.
 And its minor affections and is bilious fever less in
 upon the bowels. In proof of this statement it
 may be stated, that, they make their appearance
 at the same season of the year - are produced by

"degree of precision in the system. General

The same cause addressed the same condition in this case. It is true that now and then Cholera may be traced to other causes, especially intoxication and in occasional instances taken into the stomach, but its cause if this kind are at all rare occurred commonly as epidemic and indeed, do not occur at all unless there is a certain stateⁿ. It is occasionally common, even with persons who are intemperate in their habits. Flatulence and severe griping pain in the bowels succeeded by profuse discharges from the stomach and bowels. Against the matter evacuated is another more than the contents of the primæ viæ, but after a short time the discharges by vomiting and purging are of bilious matter and frequently of pale bile. There is also at this time heat, thirst hurried respiration and a frequent but weak and fluttering pulse. If the disease is not checked to the symptoms above described. There are cold extremities - great gastric distress and cramps. There is at the same time convulsions and depression.

of strength - considerable anxiety, a hurried anor-
thous. Accurately, the sitting and irregularity
of the pulse. No relief is not afforded the pa-
tient is cut off in a short time.

The Prognosis is not Very definite. "To be aware
with which it is at all liable to be confounded" the
Colic, Dysentery and Diarrhea. It may be distinguished
from colic by the absence of constipation, and from
dysentery and diarrhea, by the discharges, and blood
consisting of pain, bile and mucus with blood or mucus
As regards the Prognosis, there is much more difficulty
being extremely difficult to ascertain what will be the
termination of the case, for recovery, some time will
then under the most unfavorable circumstances and
in other instances, death is the result where we have
great reason to believe the patient is doing very well
and is in the high road to recovery.

But where there is violent and obstinate vomiting - a
great prostration of strength - much distention of
the abdomen - intermitting pulse - cold extremities



... in many cases - and not many - exceptions. For
... must be an insupportable? What leads to this -
... a favourable issue of the case, or a gradual subsidence
of the disturbed state of the stimulant, cannot arise at the
base - refreshing and quiet sleep - a return of the tempera-
ture to the surface - absence or subsidence of convulsions &c.

The appearances generally meet with upon post mortem
examinations are Marks of disease and derangement in
the digestive apparatus. There are frequently to be seen
marks of inflammation in the stomach - sometimes
by and extending down there to the intestines.

The liver too is frequently found enlarged. It is en-
larged and distended in some instances from accumu-
lations of bile. There is also a removal of several of
the feces or even their broken particles; caused per-
haps by the evacuations given to them from vomiting
in several cases.

The brain is also occasionally found not in a healthy
state. Some times it is in a state of confusion and some
times there are contractions in the same organ.

2 But occasionally it happens that although a
theory may be perfectly correct yet the formula is
wrongly deduced from it.

Reducing the practice directly from the changes we have attended it seems to follow that the only indication is the complete removal of the primary irritation or cause of the disease situated in the stomach.

It is the advice of Cullen and others to commence the treatment of Cholera by administering delicate drinks and gentle evacuants so as to evacuate the contents of the stomach and also mucilaginous infusions up the rectum in order to evacuate the intestines. But this course is not always meet, ^{any} particularly in the country where for the most part a physician is not called until the patient has been considerably reduced and weakened by the copious discharges both by stool and vomiting. Here it appears to me that the indication is to check the discharges and not promote them by those means above mentioned. But it must be confessed that there are cases where it would be soundly practiced to commence the treatment by evacuating the stomach and this is to be done by the exhibition of warm



Relaxant drinks, as before mentioned, such as warm water - warm chamomile tea. Thin chicken water. Barley water &c.

Emetics prescribed with the same intention are occasionally useful, they clear the stomach of the offending cause and the system before relaxed; more ready and the disease becomes more manageable. Practitioners were for many led to adopt this practice from an incorrect view of the case. They supposed the disease arose from a distended state of the liver, but this we have attempted to prove is not the fact. The cathartic in this case is *Spicacacum*, about \mathfrak{zj} should be given as a purge and its operation promoted by warm drink. *Spicacacum* not only evacuates the stomach, it also, soone, by its antispasmodic power, relaxes & passes.

If these means more detailed do not succeed in arresting the disease we should endeavour to relieve cramp and relax the spasmodic pain. To meet this indication several remedies may be employed, of which blood letting is the most important when judiciously used.



managed. But if it is indiscriminately use and carried to too great an extent much mischief may result from it. The quantity of blood proper to be taken away can only be determined from the nature of the case, the age as well as the strength and constitution of the patient. It is in some cases however that the pulse will not be very good, but if there is only a moderate degree of rigour the lancet may be used safely, for generally in these cases as the blood flows the system will rise. But although blood letting may be resorted to in some cases yet generally we believe the lancet should be used cautiously so much so that in many cases it is recommended even by the advocates for the remedy to draw blood sparingly and during its flow attentively watch the pulse and the effects. To produce, least the pulse should sink and any further loss of blood cause too much prostration of the system. Either from the system refusing to react or from almost all of the blood being driven in upon the large vessels or the vessels which carry on the general circulation; in



the use of tobacco & blood is wanted to excite the blood
 the reflex action of blood already partially excited
 not being any longer. It is the last of these three
 induced to believe that unless the circulation for the
 benefit is very obvious or at least in all cases when the
 propriety of blood letting is at all doubtful, it would
 be judicious not to prescribe it. Because there are
 instances of hemorrhage where the hemorrhage
 upon its utility, it would be proper to recur to the
 use of the leech both moderate stimulating by the
 addition of some stimulating article. Common salt
 Cayenne pepper answer very well. By its wise diffused
 operation on the system it seldom fails to relieve
 pain and relax spasm.

Refrigerants and emollients are well calcu-
 lated to contribute to the same end. Here it is, rem-
 isis, that are calculated to allay irritation and check
 "rising are recommended. As lime water and milk
 a tea spoon full of each repeated at short intervals.
 Alkalies are also serviceable since they aid in the

same end and operate pretty much in the same way
 But in these cases our principal reliance should
 be placed on opium. Much has been said of the
 utility of this article at different times. It may be
 given early after the evacuations from the stom-
 ach canal. For whatever stage however it is employed
 it shall derive great advantage from its use, if
 given in the form of an emulsion repeated every three
 or four hours as the urgency of the symptoms seems
 to demand. But as this mode of administering the me-
 dicine is frequently objected to by the patient and
 other circumstances may render it necessary to admin-
 ister it by the mouth it should be prepared in a
 solid shape. Cooperating with and aiding & sum-
 in allaying the irritability of the stomach and
 relieving pain, warm compressions to the region
 of the stomach are always beneficial and the best of
 these are bags of cloves, prepared by gulling pow-
 dered cloves in a flannel bag and this bag con-
 taining the cloves, is to be wrung out of hot whiskey

and water and applied as above. Also bitter herbs
prepared, precisely in the same way; beds of mint
seals and the like are very serviceable and where else
cannot be procured, will answer as a substitute very
well. The acetate of lead is recommended by the
for of iron of for action in this nervous, from analogy
principally. He supposes it wanted for a very ser-
viceable in this stage of the disease because he has
noticed a good effect from its use in helianthos
where the stomach was exceedingly irritable.

Next I have to mention a remedy whose utility I
believe does not depend on rest upon speculation or
mere conjecture. It is Calomel. It should be pre-
scribed in very small doses, from $\frac{1}{4}$ gr. to $\frac{1}{2}$ gr. and $\frac{1}{4}$
of a grain. And this dose ought to be repeated frequently
by say about every fifteen or twenty minutes.

Sulphuric Acid has been recommended by some
of the best Indian writers. Of its utility not much I
believe is known in this city.

All of the foregoing remedies feeling we should

ment resort to blisters. These should be applied to the region of the stomach and if there be a cramp at extremity in the system to send the same should be applied to each extremity.

Sinapisms of mustard applied to the sole of the feet are, indeed, of the hands are some times of decided utility. Nitric acid is recommended to be used for the same purpose that cantharides are, nor is a blister to supplant the system and a counter irritant. The acid should be diluted. To one part of acid add two of water. This is to be rubbed on the surface over the region of the stomach or applied by means of cloth dipped into the acid, to the same part and continued until it burns. The acid should then be neutralized by a solution of carbonate of potash, and now we have a blister produced which is to be treated in the same way as one from cantharides should be.

At this time I co. Diffusible Stimulants are recommended. Such as hot brandy toddy. Spirit of juniper. Oil of Turpentine. The Volatile Alkali &c.

Some detailed such is the treatment recommended by the most judicious practitioners and it seems to me that which best accords with the pathology of the disease and if duly persevered in and timely administered will be highly generally successful, in curing Cholera Morbus.

But occasionally we have to encounter some violent cases which will baffle our skill and even set at naught our exertions. When such cases occur we should call into requisition all the remedies in our possession. Some cases of Cholera Morbus are so rapid in their progress and so severe that they terminate in them in four hours. Such cases however are very malignant appearing only it is said during the prevalence of yellow fever. In ordinary times the disease terminates in about twenty four hours.

Doct. Chapman when lecturing on this disease related a case that occurred to him which arose from taking cold and melon at once and all his medicine failed so, it is unable to prevent a fatal issue to have brought.

As Cholera Morbus is exceedingly apt to recur
 it must seem proper to consider those ^{most} best calculated
 to prevent a subsequent attack and with this view
 all exciting causes should be carefully avoided. Such as
 exposure to the hot sun and night air, also excess in
 eating and drinking. Likewise improper articles
 of food and excessive exercise - passions of the mind
 and what is most important; avoid
 cold feet. Neither should we neglect paying a prop-
 per and due attention to the bowels; They should
 always be kept in a ^{salutary} state, by the occasi-
 onal administration, if required, of Castor oil or
 Calomel Magnesia or Rhubarb or what is better
 is a combination of the two last viz. Magnesia and
 Rhubarb.

Tone should also be imparted to the Digestive
 apparatus and so that bitters are highly useful
 and of these the Tonic and Pilewort root are
 said to answer best - given in the form of tea or
 an infusion and what greatly adds to their efficacy

is Chloritide. Thinned should be worn next the skin. This is highly spoken of by most writers on this subject. Its modes of operation is quite intelligible. When the disease has a very strong disposition to return or when it foretells an epidemic (which it does some times), it is said an alterative course of Mercury is certainly the most efficacious mode of treating it although it has no specific or direct operation in ~~restoring~~ restoring or curing the disease, yet it produces a resolution in the system and its action supplants that of the disease.

